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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,402	04/20/2004	Koichiro Tanaka	0756-7295	2936
31780	7590	08/08/2007	EXAMINER	
ERIC ROBINSON			SMITH, BRADLEY	
PMB 955			ART UNIT	
21010 SOUTHBANK ST.			PAPER NUMBER	
POTOMAC FALLS, VA 20165			2891	
			MAIL DATE	DELIVERY MODE
			08/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

21

Office Action Summary	Application No. 10/827,402	Applicant(s) TANAKA, KOICHIRO	
	Examiner Bradley K. Smith	Art Unit 2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 and 37 is/are allowed.
- 6) ☒ Claim(s) 24-29, 31-36 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24, 26 and 33 are rejected under 35 U.S.C. 103(a) as being obvious over Azami et al. (US 2005/0245007) in view of Yamazaki et al. (US 6,700,096). Azami disclose forming a semiconductor film by irradiating an energy beam continuously while scanning the energy beam, forming a gate electrode and forming an impurity region using the gate electrode as a mask (figures 19 -25) the energy beam is scanned by a mirror (702/802) and the device is used in display device [0003] . Azami fails to disclose blocking the beam in a direction in which the scanning direction changes. However Yamazaki et al. disclose using a shutter to block the energy beam [0128]. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Azami and Yamazaki et al. because the shutter would keep the light from damaging the semiconductor substrate (Yamazaki [0128]).

Claims 26 -29, 31-36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (US 6,506,635) in view of Yamazaki (US 6,700,096). Yamazaki et al. disclose forming a crystalline semiconductor film by irradiating an

energy beam output continuously while scanning the energy beam with an apparatus has a specular body which is fixed to a shaft and the specular body vibrates by using the shaft at its center ; forming a gate electrode over the crystalline semiconductor film; and forming an impurity region in the crystalline semiconductor film using the gate electrode as a mask (figure 4) and using a YAG laser [0031]. Yamazaki (US 6,506,635) fails to disclose blocking the beam in a direction in which the scanning direction changes. However Yamazaki et al. (US 6,700,096) disclose using a shutter to block the energy beam [0128]. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Yamazaki (US 2005/0037552) and Yamazaki et al. (2005/0277028) because the shutter would keep the light from damaging the semiconductor substrate (Yamazaki (2005/0277028) [0128]).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Art Unit: 2891

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 24-29 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 7,220,627. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 of U.S. Patent No. 7,220,627 disclose the elements of claims 24, 27, and 29 forming a crystalline semiconductor film by irradiating an energy beam output continuously while scanning the energy beam; forming a gate electrode over the crystalline semiconductor film; and forming an impurity region in the crystalline semiconductor film using the gate electrode as a mask, wherein the energy beam is blocked in a position in which a scanning direction of the energy beam changes. Claim 7 of U.S. Patent No. 7,220,627 disclose the elements of claims 25 and 28 forming a crystalline semiconductor film by irradiating an energy beam output continuously while scanning the energy beam; forming a gate electrode over the crystalline semiconductor film; and forming an impurity region in the crystalline semiconductor film using the gate electrode as a mask, wherein the energy beam is blocked in a position where a scanning of the energy beam starts and in a position where the scanning thereof ends. Claims 2 and 8 of U.S. Patent No. 7,220,627 disclose the elements of claim 26, the use of a polygon mirror.

Allowable Subject Matter

Claims 30 and 37 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record neither teaches nor suggests wherein the means for scanning has a specular body having a plane surface or a curved surface, wherein the specular body is fixed to a shaft so as to be arranged on an optical axis of the energy beam, and wherein the specular body vibrates by using the shaft as its center (claims 30 and 37) .

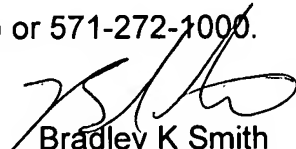
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley K. Smith whose telephone number is 571-272-1884. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2891

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Bradley K Smith
Primary Examiner
Art Unit 2891